

RAW SEQUENCE LISTING

EFS

The Biotechnology Systems Branch of the Scientific and Technical
Information Center (STIC) no errors detected.

Application Serial Number: 10/580,709
Source: IFWD
Date Processed by STIC: 3/2/07

ENTERED



IFWO

RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/580,709

DATE: 03/02/2007

TIME: 12:58:55

Input Set : N:\efs\03_02_07\10580709_efs\SubstituteSequenceListing.txt
 Output Set: N:\CRF4\03022007\J580709.raw

3 <110> APPLICANT: Vermeij, Paul
 5 <120> TITLE OF INVENTION: Lawsonia intracellularis 26 kD subunit vaccine
 7 <130> FILE REFERENCE: I-2003.023 US
 C--> 9 <140> CURRENT APPLICATION NUMBER: US/10/580,709
 C--> 10 <141> CURRENT FILING DATE: 2006-05-25
 12 <150> PRIOR APPLICATION NUMBER: PCT/EP2004/053342
 13 <151> PRIOR FILING DATE: 2004-12-08
 15 <160> NUMBER OF SEQ ID NOS: 2
 17 <170> SOFTWARE: PatentIn version 3.3
 19 <210> SEQ ID NO: 1
 20 <211> LENGTH: 856
 21 <212> TYPE: DNA
 22 <213> ORGANISM: Lawsonia intracellularis
 25 <220> FEATURE:
 26 <221> NAME/KEY: CDS
 27 <222> LOCATION: (80)..(823)
 29 <400> SEQUENCE: 1
 30 atggctataa gcgatttaat aacagaaaat aacacctatg cctgaaattt tcgacgcgtc 60
 32 gaaattttta gagaaacc atg aaa aaa cta ctc ctt ttg tta tct att ctg 112
 33 Met Lys Lys Leu Leu Leu Leu Ser Ile Leu
 34 1 5 10
 36 ttt cta acc cca agt att acc ttg gcg gaa ggt aat act ttc aat gat 160
 37 Phe Leu Thr Pro Ser Ile Thr Leu Ala Glu Gly Asn Thr Phe Asn Asp
 38 15 20 25
 40 agt ttc aac aag gct aag cgc ata ctg caa gat gag gtg tat tac gac 208
 41 Ser Phe Asn Lys Ala Lys Arg Ile Leu Gln Asp Glu Val Tyr Tyr Asp
 42 30 35 40
 44 cac caa gtt aca cta tac tgc gga tat gaa tat gat gac caa aaa agg 256
 45 His Gln Val Thr Leu Tyr Cys Gly Tyr Glu Asp Asp Gln Lys Arg
 46 45 50 55
 48 ata tgt ctc cct gat gga ttt ata gca gag aaa cat caa aaa aga tca 304
 49 Ile Cys Leu Pro Asp Gly Phe Ile Ala Glu Lys His Gln Lys Arg Ser
 50 60 65 70 75
 52 tat aaa att gag tgg gaa cat agt gtg cct gct gag aat ttt ggc aga 352
 53 Tyr Lys Ile Glu Trp Glu His Ser Val Pro Ala Glu Asn Phe Gly Arg
 54 80 85 90
 56 gct ttt act gaa tgg cgc gaa ggt cat cct ctt tgt gta gat aat aaa 400
 57 Ala Phe Thr Glu Trp Arg Glu Gly His Pro Leu Cys Val Asp Asn Lys
 58 95 100 105
 60 ggt aaa agt ttc aaa gga cga aaa tgt gca gaa aaa gta aat aaa aca 448
 61 Gly Lys Ser Phe Lys Gly Arg Lys Cys Ala Glu Lys Val Asn Lys Thr
 62 110 115 120
 64 tat aga tat atg cag tct gat atg tac aat ttg ttt cca gca gtc ggg 496

RAW SEQUENCE LISTING
PATENT APPLICATION: US/10/580,709

DATE: 03/02/2007
TIME: 12:58:55

Input Set : N:\efs\03_02_07\10580709_efs\SubstituteSequenceListing.txt
Output Set: N:\CRF4\03022007\J580709.raw

65	Tyr	Arg	Tyr	Met	Gln	Ser	Asp	Met	Tyr	Asn	Leu	Phe	Pro	Ala	Val	Gly	
66	125							130				135					
68	tct	gtc	aat	gct	gcg	aga	agc	aat	aag	caa	taa	tcg	gag	tta	ctt	gga	544
69	Ser	Val	Asn	Ala	Ala	Arg	Ser	Asn	Lys	Gln	Tyr	Ser	Glu	Leu	Leu	Gly	
70	140							145				150				155	
72	gtt	caa	tct	gct	ttt	gga	acg	tgt	gag	gca	aaa	ata	gat	ggg	aat	aga	592
73	Val	Gln	Ser	Ala	Phe	Gly	Thr	Cys	Glu	Ala	Lys	Ile	Asp	Gly	Asn	Arg	
74								160				165				170	
76	ttc	gaa	cca	ccg	gat	aga	gct	aaa	ggt	caa	gta	gcc	cgt	gct	gct	ctt	640
77	Phe	Glu	Pro	Pro	Asp	Arg	Ala	Lys	Gly	Gln	Val	Ala	Arg	Ala	Ala	Leu	
78								175				180				185	
80	tat	atg	gat	aaa	gag	tac	aag	gaa	taa	act	agt	cgt	cag	caa	aga		688
81	Tyr	Met	Asp	Lys	Glu	Tyr	Lys	Glu	Tyr	Asn	Leu	Ser	Arg	Gln	Gln	Arg	
82								190				195				200	
84	aga	ctt	ttt	gag	gct	tgg	agt	aat	atg	tat	cca	gtc	gat	gaa	tgg	gag	736
85	Arg	Leu	Phe	Glu	Ala	Trp	Ser	Asn	Met	Tyr	Pro	Val	Asp	Glu	Trp	Glu	
86								205				210				215	
88	tgt	aca	cga	aaa	cga	atc	gaa	tct	ata	cag	gga	aat	gaa	aat	att		784
89	Cys	Thr	Arg	Ala	Lys	Arg	Ile	Glu	Ser	Ile	Gln	Gly	Asn	Glu	Asn	Ile	
90								220				225				230	235
92	ttt	gta	aaa	aat	atg	tgt	atc	gaa	aag	ggg	tta	tgg	taa	acaaacgagg			833
93	Phe	Val	Lys	Asn	Met	Cys	Ile	Glu	Lys	Gly	Leu	Trp					
94								240				245					
96	acaatataaa	tactacctaa	gta														856
99	<210>	SEQ ID NO:	2														
100	<211>	LENGTH:	247														
101	<212>	TYPE:	PRT														
102	<213>	ORGANISM:	Lawsonia intracellularis														
104	<400>	SEQUENCE:	2														
106	Met	Lys	Lys	Leu	Leu	Leu	Leu	Leu	Ser	Ile	Leu	Phe	Leu	Thr	Pro	Ser	
107	1				5					10				15			
110	Ile	Thr	Leu	Ala	Glu	Gly	Asn	Thr	Phe	Asn	Asp	Ser	Phe	Asn	Lys	Ala	
111					20				25				30				
114	Lys	Arg	Ile	Leu	Gln	Asp	Glu	Val	Tyr	Tyr	Asp	His	Gln	Val	Thr	Leu	
115					35			40				45					
118	Tyr	Cys	Gly	Tyr	Glu	Tyr	Asp	Asp	Gln	Lys	Arg	Ile	Cys	Leu	Pro	Asp	
119					50			55				60					
122	Gly	Phe	Ile	Ala	Glu	Lys	His	Gln	Lys	Arg	Ser	Tyr	Lys	Ile	Glu	Trp	
123	65				70				75				80				
126	Glu	His	Ser	Val	Pro	Ala	Glu	Asn	Phe	Gly	Arg	Ala	Phe	Thr	Glu	Trp	
127					85				90				95				
130	Arg	Glu	Gly	His	Pro	Leu	Cys	Val	Asp	Asn	Lys	Gly	Lys	Ser	Phe	Lys	
131					100			105				110					
134	Gly	Arg	Lys	Cys	Ala	Glu	Lys	Val	Asn	Lys	Thr	Tyr	Arg	Tyr	Met	Gln	
135					115			120				125					
138	Ser	Asp	Met	Tyr	Asn	Leu	Phe	Pro	Ala	Val	Gly	Ser	Val	Asn	Ala	Ala	
139					130			135				140					
142	Arg	Ser	Asn	Lys	Gln	Tyr	Ser	Glu	Leu	Leu	Gly	Val	Gln	Ser	Ala	Phe	
143	145							150				155				160	

RAW SEQUENCE LISTING
PATENT APPLICATION: US/10/580,709

DATE: 03/02/2007
TIME: 12:58:55

Input Set : N:\efs\03_02_07\10580709_efs\SubstituteSequenceListing.txt
Output Set: N:\CRF4\03022007\J580709.raw

146 Gly Thr Cys Glu Ala Lys Ile Asp Gly Asn Arg Phe Glu Pro Pro Asp
147 165 170 175
150 Arg Ala Lys Gly Gln Val Ala Arg Ala Ala Leu Tyr Met Asp Lys Glu
151 180 185 190
154 Tyr Lys Glu Tyr Asn Leu Ser Arg Gln Gln Arg Arg Leu Phe Glu Ala
155 195 200 205
158 Trp Ser Asn Met Tyr Pro Val Asp Glu Trp Glu Cys Thr Arg Ala Lys
159 210 215 220
162 Arg Ile Glu Ser Ile Gln Gly Asn Glu Asn Ile Phe Val Lys Asn Met
163 225 230 235 240
166 Cys Ile Glu Lys Gly Leu Trp
167 245

VERIFICATION SUMMARY

PATENT APPLICATION: US/10/580,709

DATE: 03/02/2007.

TIME: 12:58:56

Input Set : N:\efs\03_02_07\10580709_efs\SubstituteSequenceListing.txt
Output Set: N:\CRF4\03022007\J580709.raw

L:9 M:270 C: Current Application Number differs, Replaced Application Number

L:10 M:271 C: Current Filing Date differs, Replaced Current Filing Date